INDEX OF AUTHORS AND PAPERS

Agrawal, D.C., see Menon, V.J. **148A** (1988) 556
Arimitsu, T., Guida, M. and Umezawa, H., Dissipative quantum field theory – thermo field dynamics **148A** (1988) 1
Arimitsu, T., Umezawa, H., Yamanaka, Y. and Papastamatiou, N.J., Spontaneous creation of dissipation in thermo field dynamics and its examples **148A** (1988) 27
Arimitsu, T., Kinetic equations within the formalism of non-equilibrium thermo field dynamics **148A** (1988) 427

Balakrishnan, V. and Chaturvedi, S., Persistent diffusion on a line **148A** (1988) 581
Bondarev, B.V., Statistical theory of systems of created reactive species **148A** (1988) 456

Canales, M., see Padró, J.A. **148A** (1988) 253
Chaturvedi, S., see Balakrishnan, V. **148A** (1988) 581
Chiccoli, C., Pasini, P. and Zannoni, C., A Monte Carlo investigation of the planar Lebwohl–Lasher lattice model **148A** (1988) 298
Cichocki, B., Linear kinetic theory of a suspension of interacting Brownian particles. I. Enskog renormalization **148A** (1988) 165
Cichocki, B., Linear kinetic theory of a suspension of interacting Brownian particles. II. Density–density autocorrelation function **148A** (1988) 191

De Fontaine, D., see Sluiter, M. **148A** (1988) 61
De Oliveira, M.J., Ising spin glass in the Bethe approximation at zero temperature **148A** (1988) 567
Despósito, M.A. and Hernández, E.S., Extension of the quantal Brownian motion model to bosonic reservoirs **148A** (1988) 267

Fu, Z.-z., see Sluiter, M. **148A** (1988) 61

Giró, A., see Padró, J.A. **148A** (1988) 253
Głaz, W., Dynamic intermolecular interactions in terms of spherical tensor algebra. Analysis of the effect of different gauge transformations **148A** (1988) 610
Guida, M., see Arimitsu, T. **148A** (1988) 1
Gumbs, G., Stopping power of a superlattice and the wake potential of swift ions **148A** (1988) 229

Hermans, L.J.F., see Horne, R. **148A** (1988) 74
Hernández, E.S., see Despósito, M.A. **148A** (1988) 267
Holdt, B., see Vogel, E. **148A** (1988) 46
Horne, R. and Hermans, L.J.F., Field induced cross effect between heat and momentum transport in a Knudsen gas **148A** (1988) 74

Izmailov, A.F. and Kessel, A.R., Indirect interaction of the localized magnetic moments **148A** (1988) 597

INDEX OF AUTHORS AND PAPERS

Agrawal, D.C., see Menon, V.J. **148A** (1988) 556
Arimitsu, T., Guida, M. and Umezawa, H., Dissipative quantum field theory – thermo field dynamics **148A** (1988) 1
Arimitsu, T., Umezawa, H., Yamanaka, Y. and Papastamatiou, N.J., Spontaneous creation of dissipation in thermo field dynamics and its examples **148A** (1988) 27
Arimitsu, T., Kinetic equations within the formalism of non-equilibrium thermo field dynamics **148A** (1988) 427

Balakrishnan, V. and Chaturvedi, S., Persistent diffusion on a line **148A** (1988) 581
Bondarev, B.V., Statistical theory of systems of created reactive species **148A** (1988) 456

Canales, M., see Padró, J.A. **148A** (1988) 253
Chaturvedi, S., see Balakrishnan, V. **148A** (1988) 581
Chiccoli, C., Pasini, P. and Zannoni, C., A Monte Carlo investigation of the planar Lebwohl–Lasher lattice model **148A** (1988) 298
Cichocki, B., Linear kinetic theory of a suspension of interacting Brownian particles. I. Enskog renormalization **148A** (1988) 165
Cichocki, B., Linear kinetic theory of a suspension of interacting Brownian particles. II. Density–density autocorrelation function **148A** (1988) 191

De Fontaine, D., see Sluiter, M. **148A** (1988) 61
De Oliveira, M.J., Ising spin glass in the Bethe approximation at zero temperature **148A** (1988) 567
Despósito, M.A. and Hernández, E.S., Extension of the quantal Brownian motion model to bosonic reservoirs **148A** (1988) 267

Fu, Z.-z., see Sluiter, M. **148A** (1988) 61

Giró, A., see Padró, J.A. **148A** (1988) 253
Głaz, W., Dynamic intermolecular interactions in terms of spherical tensor algebra. Analysis of the effect of different gauge transformations **148A** (1988) 610
Guida, M., see Arimitsu, T. **148A** (1988) 1
Gumbs, G., Stopping power of a superlattice and the wake potential of swift ions **148A** (1988) 229

Hermans, L.J.F., see Horne, R. **148A** (1988) 74
Hernández, E.S., see Despósito, M.A. **148A** (1988) 267
Holdt, B., see Vogel, E. **148A** (1988) 46
Horne, R. and Hermans, L.J.F., Field induced cross effect between heat and momentum transport in a Knudsen gas **148A** (1988) 74

Izmailov, A.F. and Kessel, A.R., Indirect interaction of the localized magnetic moments **148A** (1988) 597

Kavassalis, T.A. and Oppenheim, I., Derivation of the nonlinear hydrodynamic equations using multi-mode techniques **148A** (1988) 521
Kawasaki, K. and Sekimoto, K., Morphology dynamics of block copolymer systems **148A** (1988) 361
Kessel, A.R., see Izmailov, A.F. **148A** (1988) 597
Kim, S.-H., Quantum-kinetic calculation for net acceleration of high-energy electrons by a transverse undulating magnetic field and an electromagnetic wave **148A** (1988) 575
Kok, J.B.W., Kinetic energy and added mass of hydrodynamically interacting gas bubbles in liquid **148A** (1988) 240

L'Heureux, I. and Oppenheim, I., Generalized hydrodynamics of a nonequilibrium steady state fluid in a large temperature gradient **148A** (1988) 503

Menon, V.J. and Agrawal, D.C., Velocity of sound in the gravitational atmosphere **148A** (1988) 556
Millat, J., Ross, M., Wakeham, W.A. and Zalaf, m., The thermal conductivity of neon, methane and tetrafluoromethane **148A** (1988) 124
Millat, J., Vesovic, V. and Wakeham, W.A., On the validity of the simplified expression for the thermal conductivity of Thijsse et al. **148A** (1988) 153
Morita, T., ERRATUM to Physica 144A (1987) 118, Dimer problem solved by Vdovichenko's method **148A** (1988) 627

Oppenheim, I., see L'Heureux, I. **148A** (1988) 503
Oppenheim, I., see Kavassalis, T.A. **148A** (1988) 521

Padró, J.A., Canales, M., Sesé, G. and Giró, A., Time correlation functions in isotopic liquid mixtures **148A** (1988) 253
Papastamatiou, N.J., see Arimitsu, T. **148A** (1988) 27
Pasini, P., see Chiccoli, C. **148A** (1988) 298

Ross, M., see Millat, J. **148A** (1988) 124
Rostiashvili, V.G., Fluctuating hydrodynamics and glass transition theory **148A** (1988) 208

Schneider, T., see Würtz, D. **148A** (1988) 343
Sekimoto, K., see Kawasaki, K. **148A** (1988) 361
Sesé, G., see Padró, J.A. **148A** (1988) 253
Shiwa, Y., On the connection between the kinetic drumhead model and the Cahn–Hilliard equation in the presence of a gravitational field **148A** (1988) 414
Sluiter, M., Turchi, P., Fu, Z.-z. and De Fontaine, D., Re-examination of BCC based diagrams with constant first and second neighbor pair interactions in the cluster variation approximation **148A** (1988) 61
Soerensen, M.P., see Würtz, D. **148A** (1988) 343
Stephenson, J., Partition function zeros for the two-dimensional Ising model IV **148A** (1988) 88
Stephenson, J., Partition function zeros for the two-dimensional Ising model V **148A** (1988) 107
Strehlow, T., see Vogel, E. **148A** (1988) 46

Tonchev, N.S., Finite-size effects in a quantum exactly soluble model for structural phase transition **148A** (1988) 356
Turchi, P., see Sluiter, M. **148A** (1988) 61

Umezawa, H., see Arimitsu, T. **148A** (1988) 1
Umezawa, H., see Arimitsu, T. **148A** (1988) 27

Van Groesen, E., Time-asymptotics and the self-organization hypothesis for 2D Navier–Stokes equations **148A** (1988) 312
Vesovic, V., see Millat, J. **148A** (1988) 153
Vlad, M.O., Composition fluctuations in open systems involving noninteracting aggregates **148A** (1988) 331
Vogel, E., Holdt, B. and Strehlow, T., The initial density dependence of the viscosity of organic vapours: cyclohexane and neopentane **148A** (1988) 46

Wakeham, W.A., see Millat, J. **148A** (1988) 124
Wakeham, W.A., see Millat, J. **148A** (1988) 153
Würtz, D., Schneider, T. and Soerensen, M.P., Electromagnetic wave propagation in quasiperiodically stratified media **148A** (1988) 343

Yamanaka, Y., see Arimitsu, T. **148A** (1988) 27

Zalaf, m., see Millat, J. **148A** (1988) 124
Zanette, D.H., Two-velocity gas diffusion with removal and regeneration processes **148A** (1988) 288
Zannoni, C., see Chiccoli, C. **148A** (1988) 298

ANALYTIC SUBJECT INDEX

Added mass, effective (see *Gas bubbles, interacting*) **148A** (1988) 240
Aggregates, noninteracting
– Composition fluctuations in open systems involving noninteracting aggregates - Vlad **148A** (1988) 331
Ar (see *Isotopic liquid mixtures*) **148A** (1988) 253

BCC phase diagrams
– Re-examination of BCC based diagrams with constant first and second neighbor pair interactions in the cluster variation approximation - Sluiter et al. **148A** (1988) 61
Bethe approximation (see *Ising spin glass*) **148A** (1988) 567
Block copolymer systems
– Morphology dynamics of— - Kawasaki and Sekimoto **148A** (1988) 361
Boltzmann equation, generalized
– Two-velocity gas diffusion with removal and regeneration processes - Zanette **148A** (1988) 288
Bosonic reservoirs
– Extension of the quantal Brownian motion model to— - Despósito and Hernández **148A** (1988) 267
Brownian particles
– Linear kinetic theory of a suspension of interacting—. I. Enskog renormalization - Cichocki **148A** (1988) 165
– Linear kinetic theory of a suspension of interacting—. II. Density–density autocorrelation function - Cichocki **148A** (1988) 191

Cahn–Hilliard equation
– On the connection between the kinetic drumhead model and the—in the presence of a gravitational field - Shiwa **148A** (1988) 414
CF_4 (see *Thermal conductivity*) **148A** (1988) 124
CH_4 (see *Knudsen gas*) **148A** (1988) 74
CH_4 (see *Thermal conductivity*) **148A** (1988) 124
Cluster variation method (see *BCC phase diagrams*) **148A** (1988) 61
Collective mode damping (see *Quantal Brownian motion*) **148A** (1988) 267
Creation of species (see *Reactive species, created*) **148A** (1988) 456
Cross effect, field induced
– Field induced cross effect between heat and momentum transport in a Knudsen gas - Horne and Hermans **148A** (1988) 74
Cyclohexane (see *Vapours, organic*) **148A** (1988) 46

Decay of species (see *Reactive species, created*) **148A** (1988) 456
Density–density autocorrelation function
– Linear kinetic theory of a suspension of interacting Brownian particles. II.— - Cichocki **148A** (1988) 191
Dissipation, selective (see *Navier–Stokes equations, two-dimensional*) **148A** (1988) 312

Dissipation, spontaneous creation of
– Spontaneous creation of dissipation in thermo field dynamics and its examples - Arimitsu et al. **148A** (1988) 27
Dissipation, spontaneous creation of (see *Dissipative quantum field theory*) **148A** (1988) 1
Dissipative quantum field theory
– — thermo field dynamics - Arimitsu et al. **148A** (1988) 1
Drumhead free energy (see *Kinetic drumhead model*) **148A** (1988) 414
Dynamical intermolecular interactions
– Dynamic intermolecular interactions in terms of spherical tensor algebra. Analysis of the effect of different gauge transformations - Głaz **148A** (1988) 610

Electron–phonon system (see *Thermo field dynamics, non-equilibrium*) **148A** (1988) 427
Electrons, high-energy
– Quantum-kinetic calculation for net acceleration of high-energy electrons by a transverse undulating magnetic field and an electromagnetic wave - Kim **148A** (1988) 575
Enskog renormalization
– Linear kinetic theory of a suspension of interacting Brownian particles. I.— - Cichocki **148A** (1988) 165
Ergodicity–nonergodicity transition (see *Glass transition*) **148A** (1988) 208
Erratum
– —to Physica 144A (1987) 118, Dimer problem solved by Vdovichenko's method - Morita **148A** (1988) 627
Exactly soluble model
– Finite-size effects in a quantum—for structural phase transition - Tonchev **148A** (1988) 356

Finite-size scaling (see *Exactly soluble model*) **148A** (1988) 356
Fluctuating hydrodynamics
– —and glass transition theory - Rostiashvili **148A** (1988) 208
Fluctuations, composition (see *Aggregates, noninteracting*) **148A** (1988) 331

Gas bubbles, interacting
– Kinetic energy and added mass of hydrodynamically interacting gas bubbles in liquid - Kok **148A** (1988) 240
Gas diffusion
– Two-velocity—with removal and regeneration processes - Zanette **148A** (1988) 288
Gauge transformations
– Dynamic intermolecular interactions in terms of spherical tensor algebra. Analysis of the effect of different— - Głaz **148A** (1988) 610
Glass transition
– Fluctuating hydrodynamics and—theory - Rostiashvili **148A** (1988) 208
Gravitational atmosphere (see *Sound velocity*) **148A** (1988) 556

HD (see *Knudsen gas*) **148A** (1988) 74
Hydrodynamic equations, non-linear
– Derivation of the nonlinear hydrodynamic equations using multi-mode techniques - Kavassalis and Oppenheim **148A** (1988) 521
Hydrodynamics, generalized (see *Steady state fluid*) **148A** (1988) 503

Indirect interaction
– —of the localized magnetic moments - Izmailov and Kessel **148A** (1988) 597

Ions, swift
– Stopping power of a superlattice and the wake potential of swift ions - Gumbs **148A** (1988) 229
Ising model, two-dimensional
– Partition function zeros for the two-dimensional Ising model IV - Stephenson **148A** (1988) 88
– Partition function zeros for the two-dimensional Ising model V - Stephenson **148A** (1988) 107
Ising spin glass
– —in the Bethe approximation at zero temperature - De Oliveira **148A** (1988) 567
Isotopic liquid mixtures
– Time correlation functions in— - Padró et al. **148A** (1988) 253

Kinetic drumhead model
– On the connection between the—and the Cahn–Hilliard equation in the presence of a gravitational field - Shiwa **148A** (1988) 414
Kinetic energy density (see *Gas bubbles, interacting*) **148A** (1988) 240
Kinetic equations
– —within the formalism of non-equilibrium thermo field dynamics - Arimitsu **148A** (1988) 427
Kinetic theory (see *Brownian particles*) **148A** (1988) 165
Knudsen gas
– Field induced cross effect between heat and momentum transport in a— - Horne and Hermans **148A** (1988) 74

Langevin equation, generalized (see *Hydrodynamic equations, non-linear*) **148A** (1988) 521
Laser wave (see *Electrons, high-energy*) **148A** (1988) 575
Layered electron gas (see *Superlattice, type I*) **148A** (1988) 229
Lebwohl–Lasher model
– A Monte Carlo investigation of the planar Lebwohl–Lasher lattice model - Chiccoli et al. **148A** (1988) 298
Light scattering (see *Steady state fluid*) **148A** (1988) 503
Liquid crystals (see *Lebwohl–Lasher model*) **148A** (1988) 298
Liquid mixtures, isotopic
– Time correlation functions in isotopic liquid mixtures - Padró et al. **148A** (1988) 253
Localized magnetic moments
– Indirect interaction of the— - Izmailov and Kessel **148A** (1988) 597

Magnetic field, transverse undulating (see *Electrons, high-energy*) **148A** (1988) 575
Mode-coupling theory
– Fluctuating hydrodynamics and glass transition theory - Rostiashvili **148A** (1988) 208
Mode–mode coupling theory
– Derivation of the nonlinear hydrodynamic equations using multi-mode techniques - Kavassalis and Oppenheim **148A** (1988) 521
Molecular dynamics simulation (see *Isotopic liquid mixtures*) **148A** (1988) 253
Monte Carlo simulation (see *Lebwohl–Lasher model*) **148A** (1988) 298
Morphology dynamics
– —of block copolymer systems - Kawasaki and Sekimoto **148A** (1988) 361
Multilayers (see *Quasiperiodic media*) **148A** (1988) 343

Navier–Stokes equations, two-dimensional
– Time-asymptotics and the self-organization hypothesis for 2D Navier–Stokes equations - van Groesen **148A** (1988) 312
Ne (see *Thermal conductivity*) **148A** (1988) 124

Neopentane (see *Vapours, organic*) **148A** (1988) 46
Non-equilibrium phenomena (see *Thermo field dynamics*) **148A** (1988) 27
N_2 (see *Knudsen gas*) **148A** (1988) 74

Open systems (see *Aggregates, noninteracting*) **148A** (1988) 331
Oscillating-disk viscometers (see *Viscosity of organic vapours*) **148A** (1988) 46

Partition function zeros
– —for the two-dimensional Ising model IV - Stephenson **148A** (1988) 88
– —for the two-dimensional Ising model V - Stephenson **148A** (1988) 107
Persistent diffusion
– —on a line - Balakrishnan and Chaturvedi **148A** (1988) 581
Phase separation kinetics
– On the connection between the kinetic drumhead model and the Cahn–Hilliard equation in the presence of a gravitational field - Shiwa **148A** (1988) 414
Phase transition, structural (see *Exactly soluble model*) **148A** (1988) 356
Polyatomic gases (see *Thermal conductivity*) **148A** (1988) 153
Polymers (see *Block copolymer systems*) **148A** (1988) 361

Quadratic lattice (see *Ising model, two-dimensional*) **148A** (1988) 88
Quantal Brownian motion
– Extension of the—model to bosonic reservoirs - Despósito and Hernández **148A** (1988) 267
Quantum kinetics (see *Electrons, high-energy*) **148A** (1988) 575
Quasiperiodic media
– Electromagnetic wave propagation in quasiperiodically stratified media - Würtz et al. **148A** (1988) 343

Random walk
– Persistent diffusion on a line - Balakrishnan and Chaturvedi **148A** (1988) 581
Reactive species, created
– Statistical theory of systems of created reactive species - Bondarev **148A** (1988) 456
Removal and regeneration events (see *Gas diffusion*) **148A** (1988) 288
Renormalized interaction representation (see *Dissipative quantum field theory*) **148A** (1988) 1
Reptation model
– Morphology dynamics of block copolymer systems - Kawasaki and Sekimoto **148A** (1988) 361

Self-consistent-field approximation (see *Superlattice, type I*) **148A** (1988) 229
Self-organization (see *Navier–Stokes equations, two-dimensional*) **148A** (1988) 312
Sound velocity
– Velocity of sound in the gravitational atmosphere - Menon and Agrawal **148A** (1988) 556
Spherical tensor algebra (see *Dynamical intermolecular interactions*) **148A** (1988) 610
Spin glass, Ising
– Ising spin glass in the Bethe approximation at zero temperature - De Oliveira **148A** (1988) 567
Steady state fluid
– Generalized hydrodynamics of a nonequilibrium—in a large temperature gradient - L'Heureux and Oppenheim **148A** (1988) 503
Stopping power (see *Superlattice, type I*) **148A** (1988) 229
Superlattice, type I
– Stopping power of a superlattice and the wake potential of swift ions - Gumbs **148A** (1988) 229
Suspensions of interacting Brownian particles

– Linear kinetic theory of a suspension of interacting Brownian particles. I. Enskog renormalization - Cichocki **148A** (1988) 165
– Linear kinetic theory of a suspension of interacting Brownian particles. II. Density–density autocorrelation function - Cichocki **148A** (1988) 191

Telegraph equation
– Persistent diffusion on a line - Balakrishnan and Chaturvedi **148A** (1988) 581
Thermal conductivity
– The—of neon, methane and tetrafluoromethane - Millat et al. **148A** (1988) 124
– On the validity of the simplified expression for the—of Thijsse et al. - Millat et al. **148A** (1988) 153
Thermo field dynamics
– Dissipative quantum field theory —- - Arimitsu et al. **148A** (1988) 1
– Spontaneous creation of dissipation in—and its examples - Arimitsu et al. **148A** (1988) 27
Thermo field dynamics, non-equilibrium
– Kinetic equations within the formalism of non-equilibrium thermo field dynamics - Arimitsu **148A** (1988) 427
Time-asymptotics (see *Navier–Stokes equations, two-dimensional*) **148A** (1988) 312
Time-correlation functions (see *Brownian particles*) **148A** (1988) 165
Time-correlation functions (see *Isotopic liquid mixtures*) **148A** (1988) 253
Transition rates (see *Quantal Brownian motion*) **148A** (1988) 267
Triangular lattice (see *Ising model, two-dimensional*) **148A** (1988) 88
Triangular lattice (see *Ising model, two-dimensional*) **148A** (1988) 107
Two-velocity gas model
– Two-velocity gas diffusion with removal and regeneration processes - Zanette **148A** (1988) 288

Vapours, organic
– The initial density dependence of the viscosity of organic vapours: cyclohexane and neopentane - Vogel et al. **148A** (1988) 46
Viscosity of organic vapours
– The initial density dependence of the—: cyclohexane and neopentane - Vogel et al. **148A** (1988) 46

Wake potential (see *Superlattice, type I*) **148A** (1988) 229
Wave propagation, electromagnetic
– Electromagnetic wave propagation in quasiperiodically stratified media - Würtz et al. **148A** (1988) 343